

- 1 1. An article of manufacture comprising a sheet or film formed from a
- 2 biodegradable thermoplastic composition that includes at least one thermoplastic
- 3 biodegradable polymer and at least one type of filler particles, at least a portion of the filler
- 4 particles having particle size diameters that are equal to or greater than the thickness of the
- 5 sheet or film.
- 6
- 7 2. An article of manufacture as defined in claim 1, wherein the filler particles
- 8 comprise at least one of inorganic filler particles and organic filler particles.
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- 10 3. An article of manufacture as defined in claim 1, wherein the inorganic filler
- 11 particles have a concentration greater than about 10% by weight of the biodegradable
- 12 thermoplastic composition.
- 13
- 14 4. An article of manufacture as defined in claim 1, wherein the inorganic filler
- 15 particles have a concentration greater than about 20% by weight of the biodegradable
- 16 thermoplastic composition.
- 17
- 18 5. An article of manufacture as defined in claim 1, wherein the inorganic filler
- 19 particles have a concentration greater than about 30% by weight of the biodegradable
- 20 thermoplastic composition.
- 21
- 22 6. An article of manufacture as defined in claim 1, wherein the sheet or film has
- 23 dead-fold of at least about 50%.
- 24
- 25 7. An article of manufacture as defined in claim 1, wherein the sheet or film has
- 26 dead-fold of at least about 70%.

1 8. An article of manufacture as defined in claim 1, wherein the sheet or film has
2 dead-fold of at least about 80%.

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4 9. An article of manufacture as defined in claim 1, wherein the sheet or film has
5 a measured thickness in a range of about 0.0003" to about 0.01".

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7 10. An article of manufacture as defined in claim 1, wherein the sheet or film has
8 a measured thickness in a range of about 0.0005" to about 0.003".

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10 11. An article of manufacture as defined in claim 1, wherein the sheet or film has
11 a measured thickness in a range of about 0.001" to about 0.002".

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13 12. An article of manufacture as defined in claim 1, wherein the sheet or film has
14 a moisture vapor transmission rate of at least about 80 g/m²/day.

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16 13. An article of manufacture as defined in claim 1, wherein the biodegradable
17 thermoplastic composition includes at least one stiff thermoplastic biodegradable polymer
18 and at least one soft thermoplastic biodegradable polymer, and optionally at least one of a
19 nonbiodegradable polymer or fibers.

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21 14. An article of manufacture as defined in claim 1, wherein at least a portion of
22 the soft thermoplastic biodegradable polymer comprises thermoplastic starch that is
23 substantially free of plasticizers.

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25 15. An article of manufacture as defined in claim 1, wherein the sheet or film
26 comprises a food wrap.

1 16. An article of manufacture consisting essentially of a sheet or film formed from
2 a biodegradable thermoplastic composition that comprises at least one thermoplastic
3 biodegradable polymer, wherein the sheet or film is textured so as to have dead-fold of at
4 least about 70%.

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6 17. An article of manufacture as defined in claim 16, wherein the textured sheet
7 or film has dead-fold of at least about 80%.

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1 18. An article of manufacture comprising a sheet or film formed from a
2 biodegradable thermoplastic composition that comprises at least one thermoplastic
3 biodegradable polymer and at least one type of filler particles included in an amount so that
4 the sheet or film has dead-fold of at least about 70%.

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6 19. An article of manufacture as defined in claim 18, wherein the sheet or film
7 has dead-fold of at least about 80%.

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9 20. An article of manufacture as defined in claim 18, wherein the sheet or film
10 has dead-fold of about 100%.

11
12 21. An article of manufacture as defined in claim 18, wherein the filler particles
13 are included in an amount greater than about 10% by weight of the biodegradable
14 thermoplastic composition.

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16 22. An article of manufacture as defined in claim 18, wherein the filler particles
17 are included in an amount greater than about 20% by weight of the biodegradable
18 thermoplastic composition.

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20 23. An article of manufacture as defined in claim 18, wherein the filler particles
21 are included in an amount greater than about 30% by weight of the biodegradable
22 thermoplastic composition.
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